



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/280,601	03/29/99	YANG	OPT-20500

DELIO & PETERSON  
121 WHITNEY AVENUE  
NEW HAVEN CT 06510

IM22/1016

EXAMINER  
SERGENT, R

ART UNIT  
1711

PAPER NUMBER  
15

DATE MAILED: 10/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/280,601**

Applicant(s)  
**Yang et al.**

Examiner  
**Rabon Sergeant**

Art Unit  
**1711**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jul 2, 2001
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-58 and 80-135 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-58 and 80-135 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. Claims 121, 122, and 133 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of "and" and "or" within the Markush group language of claim 121, with respect to the definition of  $R_3$ , renders the claims indefinite, because it is unclear if or what combinations are denoted by the language. The language does not parallel the language of previous claims.

2. Claims 134 and 135 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The subject matter of amended claim 134 is confusing, because it specifies that the composition of claim 116 is in solution; however, the claim further states that this solution is bulk polymerized. Bulk polymerization excludes compositions in solution.

3. Claims 134 and 135 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to provide support for the concept of bulk polymerizing a solution.

See paragraph 2.

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4. Claims 134 and 135 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have claimed a curable monomer composition; however, applicants further refer to polymerization of the composition to form a terpolymer. However, it is unclear that claim 134 is directed to anything other than the monomer composition. It remains unclear how the polymerization language further modifies the composition. Applicants' response has not addressed this issue.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely-filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 116-135 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,008,296. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to a composition comprising equivalent reactants.

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7. Claims 116, 117, 124-132, 134, and 135 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to indicate where support exists for stating that the polyene contains only vinyl functional groups. Within the parent application, this language was specified with a structural formula for the polyene, which contained only vinyl functional groups.

Despite applicants' response, the position is maintained that the statement that the polyene contains only vinyl functional groups constitutes new matter when not presented with structural formulas which contain only vinyl functional groups. The specification fails to recite that only vinyl functional groups may be present within the polyene. Rather, the concept of using polyene which only contain vinyl functional groups is only indirectly set forth by the formula set forth within line 35 of page 7. To now expand the requirement that all of the polyenes, including those excluded by the formula, have only vinyl functional groups sets forth a concept not originally presented by applicants.

8. The prior art rejection set forth within paragraphs 6-8 of the Office action of September 13, 2000 has been withdrawn in view of the claim limitation requiring the polyene to have only vinyl functional groups.

9. Claims 23-58 and 80-115 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey

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to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The examiner has not found support for the range of polythiol compounds represented by formula (1) within claims 23, 27 and 55. Contrary to applicants' argument, the recitation of one species does not provide support for an entire genus of compounds. Also, clear support has not been found for the terminology, "neither a hydroxyl group nor a mercapto group", within claims 23, 27, 55, 80, 84 and 112. The position is taken that the disclosure of a limited number of specific compounds which lack a hydroxyl or mercapto group is not sufficient to provide support for an entire genus of compounds. Lastly, support has not been found for the entire ratio range of claims 26, 30, 83, and 87.

10. Applicants' arguments of December 11, 2000 and July 2, 2001 have been considered.

While the arguments may have merit with respect to the issue of an interference, they are not sufficient to resolve the 35 U.S.C. 112, first paragraph issues. The disclosure must provide full support for the claimed subject matter.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent/th

October 2, 2001

  
**RABON SERGENT**  
**PRIMARY EXAMINER**